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REMARKS

Claims 22-24, 26, 28, and 29 are pending in the application with claims 22 and 28 amended herein and claims 16-21, 25, and 27 canceled herein.

Claims 16-21 and 27 stand rejected under 35 U.S.C. 102(b) as being anticipated by Schugraf et al. Claims 16, 18-21, and 27 stand rejected under 35 U.S.C. 102(e) as being anticipated by Al-Shareef et al. Without admitting to the propriety of the rejections, Applicant notes that the rejected claims are canceled herein.

Claims 16, 18-24, and 27-29 stand rejected under 37 U.S.C. 102(e) as being anticipated by Chi. Applicant requests reconsideration. Claims 16 and 18-21 are canceled herein. Applicant notes that the subject matter of previous claim 25 was not rejected as anticipated by Chi and that the entire subject matter of such claim is herein incorporated into claim 22 by amendment. Accordingly, claim 22 and claims 23, 24, and 26 depending therefrom are not anticipated by Chi. Claim 28 is also amended herein to set forth, as in previous claim 25, that the first electrode contains TiN. Accordingly, Chi does not anticipate claim 28 and claim 29 depending therefrom. Applicant requests allowance of claims 22-24, 26, 28, and 29 in the next Office Action.

Claims 16-29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Background of the Invention in view of Schugraf et al. Applicant requests reconsideration.

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Amended claim 22 sets forth a capacitor construction that includes, among other features, an opening in an insulative layer, a HSG polysilicon layer over sides of the opening but not over the bottom, a conformal first capacitor electrode containing TiN on the polysilicon, a capacitor dielectric layer, and a second capacitor electrode. Pages 5-6 of the Office Action allege that the Background of the Invention in view of Schugraf discloses every limitation of claim 22. However, review of the cited combination reveals that neither reference discloses a HSG polysilicon layer over the sides of the opening but not over the bottom. In addition, the Office Action does not allege that either reference discloses or suggests the subject limitation of claim 22.

Applicant notes that page 16, line 19 to page 17, line 6 of the present specification discusses the advantage of not having the HSG polysilicon layer over the bottom of the opening to prevent high contact resistance or an open circuit. Neither the Background nor Schugraf recognize the advantages of the structural features set forth in claim 22. At least for such reasons, claim 22 is patentable over the Background in view of Schugraf. Claims 23, 24, and 26 depend from claim 22 and are patentable at least for such reason as well as for the additional limitations of such claims not disclosed or suggested.

Amended claim 28 sets forth a capacitor construction that includes, among other features, an opening in an insulative layer, a HSG polysilicon layer over sides of the opening but not over the bottom, a conformal first

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capacitor electrode containing TiN on the polysilicon, a capacitor dielectric layer, and a second capacitor electrode. As may be appreciated from the discussion above regarding the deficiencies of the Background in view of Schugraf as applied to claim 22, the cited combination fails to disclose or suggest every limitation of claim 28. Claim 29 depends from claim 28 and is patentable at least for such reason as well as for the additional limitations of such claim not disclosed or suggested.


As indicated above, Applicant asserts that claims 22-24, 26, 28, and 29 are patentable over the Background in view of Schugraf and requests allowance of such claims in the next Office Action.

Applicant notes that the entire subject matter of amended claim 22 previously appeared before the Office in the context of previous claim 25. Accordingly, any new ground of rejection of claim 22 must be presented as a nonfinal rejection.

Applicant herein establishes adequate reasons supporting patentability of all pending claims and requests their allowance in the next Office Action.

Respectfully submitted,

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